



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,652	11/28/2000	Raymond C. Pang	X-805-1 US	7708

24309 7590 09/28/2004

XILINX, INC
ATTN: LEGAL DEPARTMENT
2100 LOGIC DR
SAN JOSE, CA 95124

EXAMINER

JUNG, DAVID YIUK

ART UNIT PAPER NUMBER

2134

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/724,652

Applicant(s)

PANG ET AL.

Examiner

David Y Jung

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1- 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/5
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

CLAIMS PRESENTED

Claims 1-27 are presented.

CLAIM REJECTIONS

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (hereinafter also referred by abbreviation "APA").

Regarding claim 18, APA teaches "In a PLD having a decryptor for decrypting an encrypted bitstream and a plurality of keys for use by the decryptor, a method of using ... comprising: providing a ... to a first designer for encrypting a first part of a design; and providing a ... to a second designer for encrypting a second part of the design (especially at page 3: As in the prior art, this is accomplished by encrypting the configuration data for storing it in a memory outside the integrated circuit device, loading one or more decryption keys into the PLD and maintaining the keys in the PLD when powered down, including a decryption circuit within the PLD that uses the key to decrypt

the configuration data, generating decrypted configuration data within the PLD and configuring the PLD using the decrypted configuration data)."

APA is not explicit about the plurality of keys being used in such particular ways of the claimed invention (albeit APA does mention having one or more decryption keys, rather than encryption). Nevertheless, it is well known in the art to use keys in such particular ways for the motivation of particular security.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to modify the teachings of APA for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 19, APA teaches "In a PLD having a decryptor for decrypting an encrypted bitstream and a key for use by the decryptor, a method of using the PLD comprising: placing the PLD into a ... mode; and loading the key into the PLD. (especially at page 3: As in the prior art, this is accomplished by encrypting the configuration data for storing it in a memory outside the integrated circuit device, loading one or more decryption keys into the PLD and maintaining the keys in the PLD when powered down, including a decryption circuit within the PLD that uses the key to decrypt the configuration data, generating decrypted configuration data within the PLD and configuring the PLD using the decrypted configuration data)."

APA is not explicit about the non-secure mode being used in such particular ways of the claimed invention. Nevertheless, it is well known in the art to use non-secure mode to load in such particular ways for the motivation of ease of loading.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to modify the teachings of APA for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 20 (secure mode, etc.) such features are well known in the art for the motivation of security. Regarding claims 21, 22 (using both non-secure and secure mode at various times, etc.) such features are well known in the art for the motivations of security and ease of loading. Regarding claims 24, 25 (using CRC checksum, etc.), such features are well known in the art for the motivations of security and error-correction.

Allowable Subject Matter

Claims 1-17, 26-27 are allowed.

The following is an examiner's statement of reasons for allowance: As noted at pages 1-7 (especially at pages 1-3 and the first paragraph of page 4) of the specification of this application, the prior art did not teach or suggest the particular ways of the claimed invention loading configuration data (or data of equivalent function) into the configuration memory.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.

Points of Contact

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-5606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Application/Control Number: 09/724,652

Page 6

Art Unit: 2134


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to David Jung whose telephone number is (703) 308-5262
or Greg Morse whose telephone number is (703) 308-4789.

David Jung

Patent Examiner

2004-09-19

A handwritten signature in black ink, appearing to be 'DJ' followed by a long horizontal stroke.